

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for plasma-enhanced chemical vapor deposition in which a discharge electrode and a substrate are disposed opposite to each other in a vacuum film formation chamber into which a gas for forming a film containing a substance has been introduced, and high-frequency electric power generated by a high-frequency electric power feeding circuit is fed to a plurality of feeding points provided to the discharge electrode through a plurality of external cables which are disposed outside the vacuum film formation chamber and then through a plurality of internal cables which are disposed inside the vacuum film formation chamber and which correspond with the external cables, respectively, so as to generate plasma between the discharge electrode and the substrate to vapor deposit the substance on the substrate,

wherein the discharge electrode is assembled from a plurality of longitudinal electrodes which are parallel to one another, and a pair of transverse electrodes are disposed in which are parallel opposite to each other to one another, the transverse electrodes being perpendicular to the longitudinal electrodes and located at each end of the longitudinal electrodes, each of the transverse electrodes being provided with the plurality of feeding points;

wherein a plurality of high-frequency electric power supplies feed the high-frequency electric power to the plurality of the feeding points through the external cable and the internal cables;

wherein phases of the high-frequency electric power at the feeding points are adjusted by changing electrical characteristics of the external cables, the high-frequency electric power being fed to the plurality of feeding points; and

wherein the phases of the high-frequency electric power at the feeding points, the high-frequency electric power being fed to the plurality of feeding points, are adjusted by carrying out vapor deposition with change in electrical characteristics of the external cables, carrying out observations of the condition of the substance which has been vapor deposited on the substrate, and changing the electrical characteristics of the external cables on the basis of the observations.

Claim 2 (Canceled).

Claim 3 (Previously Presented): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein said electrical characteristics are changed by changing lengths of the external cables.

Claim 4 (Original): A method for plasma-enhanced chemical vapor deposition according to claim 3, wherein the lengths of the external cables are changed by attaching or detaching at least one connector.

Claim 5 (Previously Presented): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein the external cable is in a structure such that a conductor is surrounded by an insulating material, and said electrical characteristics are changed by changing a relative dielectric constant of the insulating material.

Claim 6 (Previously Presented): A method for plasma-enhanced chemical vapor deposition according to claim 5, wherein the insulating material of the external cable is polytetrafluoroethylene.

Claims 7-8 (Canceled).

Claim 9 (New): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein the discharge electrodes assembled from the plurality of longitudinal electrodes are formed of electrode rods.

Claim 10 (New): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein the transverse electrodes are formed of electrode rods.

Claim 11 (New): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein each of the transverse electrodes provides eight feeding points.

Claim 12 (New): A method for plasma-enhanced chemical vapor deposition according to claim 1, wherein the eight feeding points divide the transverse electrodes into nine divisions of an equal length.

Claim 13 (New): A method for plasma-enhanced chemical vapor deposition according to claim 1, further comprising:

supplying the plurality of longitudinal electrodes with a first stream and a second stream of high-frequency electric power having a same frequency;

setting a first phase of the first stream supplied to a first end of the electrode as a standard; and

shifting a second phase of the second stream supplied to a second end of the electrode by a specific frequency with respect to the first phase of the first stream.